Attachment 1 - UCC Technical Systems Interface Matrix

	CAD (Intergraph)	Telephony (ACD/PBX)	Telephony	Motorola (MPD)	Motorola (FEMS)	EMA/Antenna	LAN/Security	DLVR	Timing	INMS	UCC Building Infrastructure	DCNET	PSN	FEMS MS/AVL	MPD MS/AVL	FEMS RMS	MPD RMS	WALES	Paging	Others
CAD (Intergraph)			ANI/ALI & caller information, TDD/TTY	PTT, Emergency button, Radio ID	DEK, Dispatch & Clear Report, MOSCAD / Printer		Gigabit Ethernet (Servers) & 100BaseT Ethernet (Workstations)		Time Sync/stamp via CAT5, RS-232, RS-485	Management information for servers, workstations, and network connections	Power, UPS, Grounding & Telecom (CAT5/Fiber) Plant			Unit status updates, FEMS unit display	Unit log-on, unit log-off, unit status changes, AVL & NCIC/WALES	FEMS event data	MPD event data	Law enforcement information via 3270 emulation	Alphanumeric pages, pager identifier	Future Wireless 911 (XY coordinates)
Telephony (ACD/PBX)			Telephone & IWS Interconnect via audio adapter (3 channel audio cable)			SATCOM Telephone	Ethernet (RJ45) MIS and ANI ALI servers	Voice via 66 block (Telephone sets) using D/A converter	Time Sync/stamp via CAT5, RS-232, RS-485	MIS Interface to INMS from PBX for PBX hardware, and software management	Power, UPS, Grounding, Wall Display (call waiting, waiting time, call queue), building paging, Telecom Cable (CAT5/Fiber,etc) Plant	5 T1s for Voice/ACD & 1 T1 Server data Network Server			Caller ID, 2 fiber optic paths for 911 circuits (CAMA Trunks), WAWAS, NAWAS				Dial Tone for Dial-out	
Telephony	ANI/ALI & caller information, TDD/TTY	Telephone & IWS Interconnect via Audio adapter (3 channel audio cable)		IWS headset Interface	IWS headset Interface		IWS & VLAN - Gigabit Ethernet (Servers) & 100BaseT Ethernet (Workstations)	Voice analog output at console headsets / ANI/ALI via RS-232 Telephone servers & ANI/ALI Server in DLVR system	Time Sync/stamp via Ethernet (RJ-45), RS-232, RS-485	Remote MTC Interface				ALI database via RS-232 modems						External Speaker
Motorola (MPD)	PTT, Emergency button, Radio ID		IWS headset Interface			Control Stations / Consolettes & Antennas	Ethernet (RJ45) - Physically separated Motorola Elite LAN	Voice via BIMS & LORI/LOMI in CEB	Time Sync/stamp from UCC/PSCC source via Motorola Radio LAN Connection	Management by Motorola Shamburg	Power, UPS, Grounding & Telecom (CAT5/7Pair/Coax & Helix) Plant	35 T1s for Voice via Channel Bank for PSCC & Remote site connection and One T1 for Motorola Elite LAN connection with PSCC via Motorola Router			Cerulean MPD message switch (Indiana Ave.)		TBD			
Motorola (FEMS)	DEK, Dispatch & Clear Report, MOSCAD / Printer		IWS headset Interface												Intergraph Soft Message Switch	TBD				
EMA/Antenna		SATCOM Telephone		Control Stations / Consolettes & Antennas				EMA audio/video conference			Power, UPS, Grounding, & Telecom (Coax/Helix) Plant									
LAN/Security	Gigabit Ethernet (Servers) & 100BaseT Ethernet (Workstations)	Ethernet (RJ45) for NETWORK, MIS, & OTM Servers & Clients	VLAN - Gigabit Ethernet (Servers) & 100BaseT Ethernet (Workstations)	Ethernet (RJ45) - Physically separated Motorola Elite LAN				Control, Playback & management information via Ethernet (RJ-45) & External Storage via Ethernet (RJ-45)	Time Sync/stamp via CAT5, RS-232, RS-485	Network & System management information (SNMP, Element Mgmt, etc) via Ethernet and INMS VLAN	Power, UPS, Grounding, Telecom (CAT5, Zone Distribution, etc) Plant	Dual Gigabit Ethernet Connection between UCC LAN Switches and DCNET Optical Muxes						Ethernet (RJ-45)		

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	CAD (Intergraph)	Telephony (ACD/PBX)	Telephony	Motorola (MPD)	Motorola (FEMS)	EMA/Antenna	LAN/Security	DLVR	Timing	INMS	UCC Building Infrastructure	DCNET	PSN	FEMS MS/AVL	MPD MS/AVL	FEMS RMS	MPD RMS	WALES	Paging	Others
DLVR		Voice via 66 block using D/A converter	Voice analog output at headsets / ANI/ALI via RS-232 Telephone servers & ANI/ALI Server in DLVR system)	Voice via BIMS & LORI/LOMI in CEB		EMA audio/video conference	Control, Playback & management information via Ethernet (RJ-45) & External Storage via Ethernet (RJ-45)		Time Sync/stamp via CAT5, RS-232, RS-485	Problems & Report	Power, UPS, Grounding, Telecom (CAT5, Tie cables, etc) Plant									
Timing	Time Sync/stamp via CAT5, RS-232, RS-485	Time Sync/stamp via CAT5, RS-232, RS-485	Time Sync/stamp via Ethernet (RJ-45), RS-232, RS-485	Time Sync/stamp from UCC/ PSCC source via Motorola Radio LAN Connection			Time Sync/stamp via CAT5, RS-232, RS-485	Time Sync/stamp via CAT5, RS-232, RS-485		Problems & Report	Power, UPS, Grounding, Telecom (CAT5, Zone Distribution, etc) Plant	T1 for Time Source from PSCC Motorola LAN/ NTP Coordination with DCNET Netclock								
INMS	Management information for servers, workstations, and network connections	OTM Interface to INMS from PBX for PBX hardware, MIS for software management	Mission Control Interface, MAGIC	Management by Motorola Shamburg			Network & System management information (SNMP, Element Mgmt, etc) via Ethernet and INMS VLAN	Problems & Report	Problems & Report		Power, UPS, Grounding, Telecom (CAT5, Zone Distribution, etc) Plant	DCNET & UCC INMS Management Information								